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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,657	10/19/2001	Raymond Zeng	10559-524001/P12428	9805

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EXAMINER

CUNNINGHAM, TERRY D

ART UNIT	PAPER NUMBER
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2816

DATE MAILED: 04/15/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/056,657

Applicant(s)

ZENG ET AL.

Examiner

Terry D. Cunningham

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-13 and 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

New Matter

The amendment filed 04 March 2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is the new language in the paragraph beginning at page 2, line 21, stating "Another output provides a constant voltage". There is nothing whatsoever recited in the original specification concerning another "output" to provide "a constant voltage". As clearly provided in the original specification, "a constant voltage (e.g., 5V) is required to supply a Flash Algorithm Code Storage". This has nothing to do with the "output" of "multifunctional pump".

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3, 5-13 and 15-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in the original specification for the new language in the paragraph beginning at page 2, line 21, stating "Another output provides a constant voltage", similarly as discussed above.

Claims 1-3, 5-13 and 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, there is no support in the specification for the new language reciting that the “multifunctional pump” is “configured to provide more than two voltages”. The specification and the drawings make it expressly clear that the “multifunctional pump” has only one output.

Claims 2-3 and 5-10 are rejected for the reasons discussed above with claim 1.

In claim 2, there is no support in the specification for the “square waveform”. Nowhere is the specification seen to disclose that the circuits of Figs. 3 or 4 can provide a “square waveform” nor would it be understood what the purpose of such is.

Examiner has considered Applicant’s remarks for the above rejection and has not found them to be persuasive. Examiner disagrees that one skilled in the art would interpret the disclosure in lines 2-4 of page 3 to set forth that the system provides “a square wave signal”.

In claim 5, it is not understood how an apparatus recitation can further limit a method.

It is not seen that Applicant has addressed the above rejection.

In claim 7, it is not understood how the “multifunction pump” can have a “standby mode”. Clearly, there is no standby operation in a “pump”

It is not understood how the amendment or the remarks address the above rejection.

In claim 8, it is not understood how the “multifunction pump” can have a “read” mode”. Clearly, there is no read operation in a “pump”

It is not understood how the amendment or the remarks address the above rejection.

In claim 9, it is not understood how the “multifunction pump” can have a “program mode”. Clearly, there is no program operation in a “pump”

It is not understood how the amendment or the remarks address the above rejection.

In claim 10, it is not understood how the “multifunction pump” can have an “erase mode”. Clearly, there is no erase operation in a “pump”

It is not understood how the amendment or the remarks address the above rejection.

In claim 11, there is no support in the specification for the new language reciting that the “multifunctional pump” is “configured to provide more than two voltages”. The specification and the drawings make it expressly clear that the “multifunctional pump” has only one output. Also, it is not understood how the “first comparator” can provide the recited operation when the claim fails to discuss how the “feedback voltage” is being generated.

Claims 12-13 and 15-20 are rejected for the reasons discussed above with claim 11.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 11-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Roohparvar (USPN 6,339,547) in view of Morishita (USPN 6,246,280).

With respect to claims 11-13, Roohparvar discloses a circuit, in Figs. 3 and 4, a circuit comprising: “a multifunctional pump (310)”; “a first switch (340)”; “a second switch (330)”; “a transistor (in Fig. 4)”. However, circuit to Roohparvar fails to disclose any details for the “voltage regulator” 320. However, it is notoriously well known in the art, such as taught in Fig.

9 of Morishita, to use a negative feedback amplifier with transistor control to provide voltage regulation. Such a configuration is notoriously well known to provide high regulation with low temperature dependence. Therefore, it would have been obvious for one skilled in the art to use a specific regulator such as taught by Morishita for the broad regulator 320 of Roohparvar for the expected results of high regulation with low temperature dependence. As seen this combination will include a “comparator” 510 connected to a “transistor” 520.

With respect to claims 1-3, clearly the above combination of Roohparvar in view of Morishita will provide the recited method.

Examiner has fully considered Applicant’s remarks for the above rejection and has not found them to be persuasive. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Additionally, the only remark seen of relevance in the discussion at the top of page 12 stating, regarding the combination, that “there would be no second output signal received from the transistor via a second switch because the second switch precedes the transistor”. This is not understood because the language of claim 1 stating that the “second output signal” is received “via a second switch” and the language of claim 11 stating that the “second switch” provides the “second output signal” broadly corresponds to the disclosure of Roohparvar.

Claims 5-10 and 15-20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 703-308-4872. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone numbers for Technology Center 2800 are 703-872-9318 for Before Final communications and 703-872-9319 for After Final communications. Please note, any faxed paper clearly stating **DRAFT** or **PROPOSED AMENDMENT** at the top will be forwarded directly to the Examiner. All others will be treated as a formal response and acted upon accordingly.

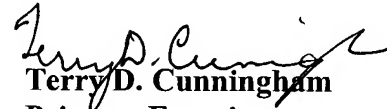
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-0956.

TC
April 14, 2003


Terry D. Cunningham
Primary Examiner
Art Unit 2816